

a layer of dielectric material formed on the first semiconductor material on the base region;

an ohmic emitter contact formed through the dielectric layer, the emitter contact having a top surface and contacting the top surface of the emitter; and

an ohmic base contact formed through the layer of dielectric material, the base contact having a top surface, contacting the top surface of the base extender, and being electrically connected to the base region, the ohmic base contact being formed from a third semiconductor material different from the second semiconductor material.

10. The device of claim 9 wherein the top surface of the base contact lies in substantially the same plane as the top surface of the emitter contact.

11. The device of claim 9 wherein the base region has a first conductivity type, the emitter has a second conductivity type, and the base extender has the first conductivity type.

12. The device of claim 9 wherein
the emitter has a width,
the emitter contact has a width that is greater than the width of the emitter, and
the base contact has a width that is less than the width of the emitter contact.

13. The device of claim 9 wherein the emitter and the base extender are polysilicon.

14. An electrostatic discharge device formed in a semiconductor material, the device comprising:

a collector region formed in the semiconductor material;

a base region formed in the collector region;

an emitter formed on the semiconductor material on the base region;

a base extender formed on the semiconductor material on the base region;

a layer of dielectric material formed on the substrate material on the base region;

an emitter contact formed through the dielectric layer, the emitter contact having a top surface and contacting the top surface of the emitter;

a base contact formed through the layer of dielectric material, the base contact having a top surface and contacting the top surface of the base extender; and

a heat sink contact formed through the layer of dielectric material, the heat sink contact having a top surface and contacting the top surface of the base.

15. The device of claim 14 wherein the top surface of the base contact lies in substantially the same plane as the top surface of the emitter contact and the top surface of the heat sink contact.

16. The device of claim 14 wherein the base region has a first conductivity type, the emitter has a second conductivity type, and the base extender has the first conductivity type.

17. The device of claim 14 wherein the emitter and the base extender are polysilicon.

18. The device of claim 14 and further comprising a first trace formed on the layer of dielectric material and the heat sink contact.

19. The device of claim 18 and further comprising:
a second layer of dielectric material formed on the first layer of dielectric material and the first trace;

a via formed through the second layer of dielectric material to make an electrical contact with the first trace; and

a second trace formed on the second layer of dielectric material to make an electrical contact with the via.

20. The device of claim 14 wherein the heat sink contact has a single electrical connection, the single electrical connection being to the base region.

21. The device of claim 14 wherein the heat sink contact includes a plurality of metal layers.

22. The device of claim 14 wherein
the layer of dielectric material has a thermal conductivity; and
the heat sink contact has a thermal conductivity that is substantially greater than the
thermal conductivity of the layer of dielectric material.--